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09/21/2005

Noriaki Yukawa

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SMITH, GAMBRELL & RUSSELL
SUITE 3100, PROMENADE II
1230 PEACHTREE STREET, N.E.
ATLANTA, GA 30309-3592

EXAMINER

MALEKZADEH, SEYED MASOUD

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,207	Applicant(s) YUKAWA ET AL.	
	Examiner SEYED M. MALEKZADEH	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009 and 12 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claims **1- 12** are pending.

Claims **8- 11** are withdrawn.

Claims **1- 7** stand rejected.

Claim **12** is newly added.

Claims **1- 3 and 5- 6** are amended.

In view of the amendment, filed on 01/27/2009 and 01/12/2009, following rejections are **withdrawn** from the previous office action for the reason of record.

- Rejection of claims 1- 2 and 5- 7 under 35 U.S.C. 102(b) as being anticipated by Kanehara (JP 9-132207)
- Rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Kanehara (JP 9-132207) in view of Larsen et al. (US 5,389,190)

In view of the amendment, filed on 01/27/2009 and 01/12/2009, following new grounds of rejections are made:

New Grounds of Rejection

35 USC § 112, First Paragraph

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims **1-7 and 12** are rejected under 35 U.S.C. 112, **first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites “a first double-acting unit having a driving direction along a straight path and being fluid-operated for driving the tape feeding out unit; and a second double-acting unit having a driving along a straight path and being fluid-operated for driving the tape taking-up unit” (see lines 7- 10) which was not described in the specification; however the specification recites “double-acting driving units provided as driving sources at least for the tape feeding unit” (see paragraph [0022]); nowhere in the specification describe above cited limitation, and further the specification fails to describe “a controller for controlling driving/stopping of the first double-acting driving unit and the second double acting driving unit in association with driving/stopping of the first double-acting driving unit.” (See lines 11- 13) Therefore, the

limitations are considered as “**new matter**” and the claim fails to comply with the written description requirement.

35 USC § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1-7 and 12** are rejected under 35 U.S.C. 112, **second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “a controller for controlling driving/stopping of the first double-acting driving unit and the second double acting driving unit in association with driving/stopping of the first double-acting driving unit for said feeding unit” (See lines 11- 13) which renders the claim indefinite. First, according to the citation of claim 1, it is conferred that the controller controls the first double-acting unit in association with the first double-acting unit. This means the controller controls the first double-acting unit through association of the first double-acting unit; it is not clear how the apparatus member can associate in controlling itself. Second, it is not clear how the controller can control the second double acting driving unit through association with the first double-acting unit. Clarification is requested.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1- 2 and 5- 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanehara (JP 9-132207) in view of Omura et al (US 4,374,463)

Kanehara (JP '207) teaches a machine for molding an embossed carrier tape of resin (1) as a carrier tape forming apparatus comprising a base (2) in which a pivotally delivery reel (3A) as a paying out unit of pay-out reel winding assembled on the base (2); further, the apparatus includes a first guidance (4b), a first tension grant roll (4c), and a second guidance roll (4d), all together, as a tape feeding unit for feeding the tape; also, the apparatus includes a guiding slit part (4e), a heating apparatus (6), a hollow processing device (7) as

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a forming unit, a sending hole processing device (8) as a perforating unit for perforating at least a feeding hole in the tape, an intermittent driving part (5) with a holding stand (5a); moreover, a third guidance roll (4f), a second tension grant roll (4g), a fourth guidance roll (4h), and a take up reel (3B) with a driving shaft (4i) are considered as a tape taking-up unit; further, Kanehara (JP '207) discloses the apparatus comprises an intermittent driving part (5) with a holding stand (5a) including a first clamp part (5c), as a first double acting unit, and a second clamp part (5d), as a second double acting unit, both having a driving direction along a straight path and being fluid operated for driving the tape feeding out unit and the tape taking -up unit; wherein the double-acting driving units are provided as driving sources of the tape feeding unit and the forming unit (7) and the taking up unit (4f, 4g, and 4h) are fluid operated and movable along a straight path and the controller (5e) controls driving/stopping of the feeding unit (4b, 4c, 4d). (See abstract and paragraphs [0006], [0028] – [0029], and [0031] - [0032]; figures 5-7)

Furthermore, Kanehara (JP '207) teaches an intermittent driving part can control a drive by numerical control to adjust the transport's quantity of the tape. (See paragraph [0013]); **however**, the prior art, **fails** to teach a controller which is associated with both of the first double-acting driving unit (5c) and the second double-acting driving unit (5d), as claimed in claim 1

In the analogous art, Omura et al (US 4,374,463) teach an apparatus for processing sheet like materials in which the apparatus comprises a unit

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sheet-stack transfer mechanism (100) functioning similar to the first double-acting unit, a transfer classifying device (300) functioning similar to the second double-acting unit, a mechanism control section (921) as a controller, a take in transfer control (922) connecting the first double-acting unit (100) and the controller (921), and a transfer classifying control (923) connecting a second double-acting unit (300) with the controller (921). Furthermore, the apparatus comprises a mechanism for forming a bundling loop, a bundling mechanism having means for inserting the unit sheet stack into the bundling loop, wherein the bundling loop forming mechanism comprises a plurality of guide plates. (See column 23, lines 57-68; column 24, lines 1-25; column 25, lines 36- 69, and figure 14B)

Therefore, **it would have been obvious** for one of ordinary skill in the analogous art at the time of applicant's invention to modify the teachings of Kanehara (JP '207) through providing a controller which is associated with the both of the first double-acting driving unit and the second double-acting driving unit **in order to** increase the production rate and to control the production process which results in avoiding damage of the produced articles, as suggested by Omura et al (US '463)

Moreover, Kanehara (JP '207) teaches the tape feeding unit includes a guiding slit part (4e) as a tape holding means movable back and forth in unison by the double-acting driving unit for the tape feeding unit and a stopper (5e) for restricting a position of the tape holding means to adjust the feeding amount of

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the tape. Furthermore, the prior art discloses the stopper (5e) includes forward most position determining portion, a rear most position determining portion and a feeding amount adjusting portion.

Also, Kanehara (JP '207) teaches the tape holding means (4e) includes at least one pair of tape holders (5c, 5d) are provided across the forming unit (7) and the perforating unit (8), and a connecting member (5b) for connecting the pair of tape holders together to be movable back and forth by the double-acting driving unit.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanehara (JP '207) in view of Omura et al (US '463), as applied to claims 1- 2 and 5- 7 above, and further in view of Larsen et al (US 5,389,190)

Combined teachings of Kanehara (JP 9-132,207) and Omura et al (US '463) teach all the structural limitations of a carrier tape forming apparatus, as discussed above in rejection of claims 1-2 and 5-7; **however**, the prior arts **fail** to teach the tape paying-out unit (3A) includes a dancer roller for adjusting a paying-out operation and a brake belt for braking a reel shaft (4a) of the pay-out reel.

In the analogous art, Larsen et al. (US 5,389,190) teaches an apparatus for applying a twist-tie to a multiple recloseable, flexible packaging container including a payout mechanism for holding a supply of twist tie material;

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further, an extracting and cutting mechanism is configured to extract a continuous length of the twist-tie material from the supply of the twist-tie material and cut a twist tie of a desired length. (See abstract) Furthermore, Larsen et al. (US '190) teaches the payout mechanism (16) includes a dancer arm (46) pivotally secured as a first end (47) via a suitable fastener (48) to the secondary support frame (14), and a second end (49) of the dancer arm (46) includes a rotatable guide roller (50) over which the continuous length of twist-tie material (25) travels subsequent to passing over a guide pin (51) mounted on an extension arm (52) of the secondary support frame (14). (See lines 8-25, column 4) Also, Larsen et al. (US '190) teaches a brake mechanism (26) forming part of the payout assembly (16) includes pneumatic cylinder (28) having an extensible rod (30). A free end (32) of the extensible rod (30) is secured to a first end (34) of a brake band (36), as a bracket belt. The brake band (36) extends around the support shaft (20) where a second end (38) of the brake band (36) is fixed to the secondary support frame (14) by a clamp (40). (See lines 54-62, column 3)

It would have been obvious for one of ordinary skill in the art at the time of applicant's invention to modify the carrier tape forming apparatus as taught by combined teachings of Kanehara (JP 9-132,207) and Omura et al (US '463) through providing a dancer roller and a brake belt for braking a reel shaft of the pay-out reel of the tape paying-out unit **in order to** extract an efficient amount of tape from the paying-out unit while minimizing the defects and

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scraps during operation of the apparatus, as suggested by Larsen et al. (US '190).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanehara (JP '207) in view of Omura et al (US '463), as applied to claims 1-2 and 5-7, and further in view of Teed (US 3,984,272)

Combined teachings of Kanehara (JP '207) and Omura et al (US '463) teaches all the structural limitations of a carrier tape forming apparatus, as discussed above in rejection of claims 1-2 and 5-7; **however**, the prior arts **fail** to teach the apparatus further include a slitting unit for slitting or cutting off a width-wise end of the tape.

In the analogous art, Teed (US '272) teaches an apparatus for successively forming disposable diapers wherein the apparatus comprises a supplying and positioning unit, and also an embossing and securing unit wherein the apparatus comprises a cutting means cooperating with the positioning means to cut the elongate pads of fibers in which the cutting means comprises feed rolls (80 and 81) positioned on each side of the elongate continuous fibers in which, together, the feed rolls form a nip there-between for receiving and feeding there-through the elongate continuous fibers. Furthermore, the prior art teaches each of the rollers (80 and 81) include a cutting blade (82 and 83), respectively. Therefore, the prior art teaches a

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slitting unit for slitting or cutting off a width off a width-wise end of the continuous fibers.

It would have been obvious for one of ordinary skill in the art at the time of applicant's invention to modify the carrier tape forming apparatus as taught by combined teachings of Kanehara (JP 9-132,207) and Omura et al (US '463) through providing a slitting or cutting unit **in order to** cut off a width-wise end of the tape in order to improve the apparatus by minimizing a cumbersome and tedious hand work for cutting the elongated tapes, as suggested by Teed (US '272).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanehara (JP '207) in view of Omura et al (US '463) as applied to claims 1- 2 and 5- 7 above, and further in view of Nakajima (US 4,578,140)

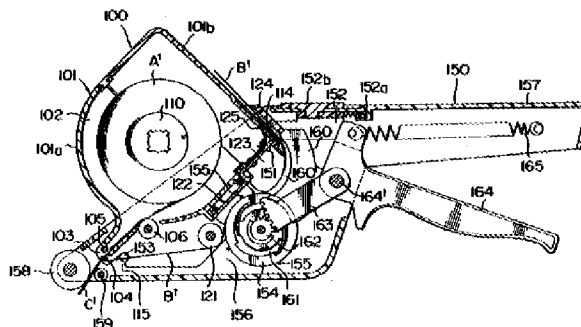
Combined teachings of Kanehara (JP '207) in view of Omura et al (US '463) teaches all the structural limitations of a carrier tape forming apparatus, as applied to claims 1- 2 and 5- 7. Further, Kanehara (JP '207) teaches the apparatus includes a take up reel (3B) installed on rod (4i) (See figure 1); **however**, the prior arts **fail** to teach the take-up reel moves with a pinion gear and a rack gear, as claimed in claim 12.

In the analogous art, Nakajima (US '140) teaches a cassette type labeler comprising a labeler body and a cassette case adapted to be attached to said labeler body comprising a base sheet, a printed label on the base sheet, an

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outlet, a peeling member at the outlet for peeling each of the printed label off from the base sheet, and stopping means for preventing movement of the base sheet through the labeler, wherein the labeler body intermittently feeds the base sheet through the labeler. (See column 16, lines 42- 68) Further, Nakajima (US '140) discloses a sprocket (154) which is connected to a gear (162), as a pinion gear, via a one way clutch (161) so that the sprocket (154) may be rotated only in the direction in which the base sheet (B') is carried rearward, and one end of a driving arm (163), as rack gear, engage with the pinion gear (162) to provide a rotation of sprocket (154). (See column 9, lines 28- 34 and figure 7)

FIG. 7



It would have been obvious for one of ordinary skill in the art at the time of applicant's invention to modify the combined teachings of Kanehara (JP '207) and Omura et al (US '463) through providing a take-up reel which moves by a pinion gear and a rack gear **in order to** provide a tape taking up unit with improved workability having an easy and smooth operation, as suggested by Nakajima (US '140).

Claim 2, recites “wherein the paying-out operation by the tape paying-out unit is effected by the double-acting driving unit provided for the tape feeding unit for feeding the tape feeding operation”; moreover, **claim 3**, recites “a braking amount of the brake belt is adjusted for adjusting an amount of the tape to be paid out from the tape paying-out, in accordance with a movement of the dancer roller associated with the feeding portion of the tape feeding unit.” (See lines 4-6) Also, **claim 5** recites “for restricting a position of the tape holding means thereby to adjust the feeding amount of the tape.” (See lines 3-4) Moreover, **claim 6** recites “the feeding amount of the tape being adjustable by the feeding amount adjusting portion.” (See lines 3-4) Also, **claim 12** recites “wherein the pinion gear and rack gear cooperate to convert straight-line driving to rotational driving of the second double-acting driving unit thereby rotating the tape taking-up reel.” (see lines 2- 4) All of these recitations are directed to the **intended use** of a carrier tape forming apparatus.

Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530.

The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235,238.

Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666.

A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *EX parte Masham*, 2 USPQ2d 1647.

Response to Arguments

Applicant's **arguments** with respect to claims 1-7 and 12, filed on 01/27/2009 and 01/12/2009, have been considered but are **moot** in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the

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advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday – Friday at 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (571) 272-1189. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the

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Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SEYED M. MALEKZADEH/

Examiner, Art Unit 1791

/Steven P. Griffin/

Supervisory Patent Examiner, Art Unit 1791